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Patent Claims

1. An assembly space in a motor vehicle for the reception of operating assemblies, which is mounted in front of a dashboard (13) separating a passenger space (12) from an engine space (11) capable of being covered by means of a hood (17) and which is closed all round with the exception of an access orifice (15) pointing towards the hood (17), with a continuous seal (31), surrounding the access orifice (15) all round, for gastight sealing off relative to the engine space (11), with an incoming air connection to an air inlet orifice (21) arranged in the hood (11), and with a waste air orifice (43), characterized by the integration of a water separator (38) and of an arrangement of the waste air orifice (43) such that the latter is approximately congruent with a dashboard orifice (16) in the dashboard (13) serving as an intake orifice of an air consumer in the passenger space (12).

2. The assembly space as claimed in claim 1, characterized by a lower shell (23) which covers the air inlet orifice (21) in the hood (17) and is sealed off relative to the hood (17) and which can be placed onto the continuous seal (31) and, within its region surrounded by the continuous seal (31), has an air passage orifice (24), and in that the water separator (38) is formed on the lower shell (23).

3. The assembly space as claimed in claim 2, characterized in that the lower shell (23) is fastened to the underside of the hood (17), preferably in one piece with a hood inner panel.

4. The assembly space as claimed in claim 2 or 3, characterized in that the water separator (38) has an

air guide plate (40) which projects from the lower shell (23) through the access orifice (15) and runs obliquely with respect to the axis of the access orifice (15) and which extends below part of the access orifice (15), and in that the waste air orifice (43) lies near the access orifice (15), behind the rear side, facing away from the air passage orifice (24), of the air guide plate (40).

5. The assembly space as claimed in claim 4, characterized in that the lower shell (23) has a trough-shaped design with a trough bottom (25') and with a flangelike trough edge (26) surrounding the trough orifice, for lying on the continuous seal (31) surrounding the access orifice (15).

6. The assembly space as claimed in claim 5, characterized in that the trough bottom (25') projects in the manner of a lean-to roof, with a narrow and a wide roof surface (251', 252') and with an underlying roof ridge (253'), through the access orifice (15), and in that the air passage orifice (24) is arranged, preferably at a distance from the roof ridge (253'), in the narrow roof surface (251'), and the wide roof surface (252') forms the air guide plate (40).

7. The assembly space as claimed in one of claims 1 - 6, characterized in that a cover (27) with a peripheral collar (28) and with a peripheral flange (29) arranged at one end of the collar (28) is arranged between the access orifice (15) and the lower shell (23), and in that the cover (27) lies with its peripheral flange (29) on the continuous seal (31) and, on its collar edge remote from the flange, carries a shell seal (30), onto which the lower shell (23) can be pressed.

8. The assembly space as claimed in claim 1, characterized by a cover (27) which covers the air

inlet orifice (21) in the hood (17) and which lies on the continuous seal (29), can be sealed off relative to the hood (17) by means of a continuous hood seal (44) surrounding the air inlet orifice (21) and, within its region surrounded by the continuous seal (31), has an air passage orifice (45), and in that the water separator (38) is integrated in the cover (27).

9. The assembly space as claimed in claim 1, characterized by a lower shell (23) covering the air inlet orifice (21) in the hood (17) and sealed off relative to the hood (17) and by a cover (27) which can be sealed off relative to the lower shell (23) by means of a shell seal (30) and which lies on the continuous seal (31), and in that the water separator (38) is integrated in the cover (27), and the lower shell (23), within its region enclosed by the shell seal (30), has an air passage orifice (24).

10. The assembly space as claimed in claim 9, characterized in that the lower shell (23) is fastened to the underside of the hood (17) and the shell seal (30) is secured to the cover (27).

11. The assembly space as claimed in claim 10, characterized in that the lower shell (23) has a trough-shaped design with a planar trough bottom (25) and a trough edge (26) surrounding the trough orifice in a flangelike manner, for lying on the shell seal (30), and in that the air passage orifice (24) is arranged in the trough bottom (25).

12. The assembly space as claimed in one of claims 8 - 11, characterized in that the cover (27) has a peripheral collar (28) and a peripheral flange (29) arranged at one collar edge, and in that the cover (27) lies with its peripheral flange (29) on the continuous seal (31) and at its collar end remote from the flange

carries the hood seal (44) or the shell seal (30).

13. The assembly space as claimed in one of claims 8 - 12, characterized in that the water separator (38) has an air guide plate (40) which projects from the cover (27) through the access orifice (15) and runs obliquely with respect to the axis of the access orifice (15) and which extends below a part of the access orifice (15), and in that the waste air orifice (43) lies near the access orifice (15), behind the rear side, facing away from the air passage orifice (24), of the air guide plate (40).

14. The assembly space as claimed in one of claims 1 - 13, characterized by a space bottom (36) and space walls which project from the space bottom (36) and of which one space wall is formed by the dashboard (13) and the opposite space wall is formed by a partition (14), running transversely in the engine space (11), for partitioning off the engine.

15. The assembly space as claimed in one of claims 1 - 13, characterized by its design as a plastic box closed on all sides and open at the top.

16. The assembly space as claimed in claim 14 or 15, characterized in that a water outflow (39) is provided in the space bottom (36) or in the bottom of the plastic box.